

## USER INTERFACE FOR CHARACTER ENTRY USING A MINIMUM NUMBER OF SELECTION KEYS

### ABSTRACT OF THE DISCLOSURE

5           Methods and apparatus for character entry, e.g., entry of alphanumeric  
characters or shorthand symbols, employing fewer hard or soft data entry keys than the  
number of characters are disclosed. Keyboards are disclosed comprising multiple  
display windows in which character groups of a defined collection of characters are  
scrolled through and a character set is simultaneously displayed for in the display  
10           windows. The character set is presented for selection in a display window for  
discrete display time periods either automatically or by user advancement. Users  
rely upon hand-eye coordination and trainable manual dexterity to "grab" the  
displayed characters on the fly or in as short a display time as possible. In the  
automatic scrolling mode, as experience is gained, the user anticipates the  
15           presentation of characters of each subset in each display window. Thus, the full  
collection of characters is presented in space and in time to reduce the time between  
character selection, and speed and accuracy of data entry are increased.